APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/330,769	06/11/1999	WAYNE E. BRETL	7081	9810

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EXAMINER
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ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 05/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>21 February 2002</u> .

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-83* is/are pending in the application.

   4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,11,16,17,29,32,37,42,46,47,56,57,59-62,64,70,74,75,81-83 and 128* is/are rejected.

7) ☒ Claim(s) *18,19,30,31,39,48,58,66 and 76* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

   If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____ .

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

   a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

Continuation of Disposition of Claims: Claims withdrawn from consideration are 2-10, 12-15, 20-27, 33-36, 38, 40-41, 43-45, 47, 49-55, 63-69, 71-73, 77-80.

DETAILED ACTION

Election/Restrictions

1.   Applicant's election without traverse of the species as depicted in figures 8-9 and as read

on by claims 1, 11, 16-19, 28-32, 37, 39, 42, 46, 48, 56-62, 70, 74-76, and 81-83 in Paper No. 4

on 2/21/02 is acknowledged.

Specification

2.   The lengthy specification has not been checked to the extent necessary to determine the

presence of all possible minor errors. Applicant's cooperation is requested in correcting any

errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined

was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment

by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4.   Claims 1, 11, 16-17, 28-29, 32, 37, 42, 46-47, and 56-57 are rejected under 35

U.S.C. 102(e) as being anticipated by Schumann et al., (hereinafter referred to as "Schumann").

Schumann discloses an MPEG on screen display coder (Schumann: column 2, lines 1-15;

column 4, lines 1-14), comprising: an on screen display turn on device arranged to provide an

output when an on screen display is to be turned on (Schumann: column 2, lines 1-15; column 4,

lines 35-40); and an MPEG encoder arranged to encode frames with the on screen display device

in response to the output of the on screen display turn on device (Schumann: column 4, lines 50-

63), as in claim 1.

Regarding claim 11, Schumann discloses that the on screen display is overlaid on video

(Schumann: column 6, lines 20-25), as specified.

Regarding claim 16, Schumann discloses that the MPEG encoder is arranged to encode I

frames (Schumann: column 6, lines 10-15), as specified.

Regarding claim 17, Schumann discloses that the MPEG encoder is arranged to encode

subsequent P frames based on the encoded I frames (Schumann: column 5, lines 5-15), as in the

claim.

Regarding claim 28, Schumann discloses that the MPEG encoder is arranged to encode I

frames (Schumann: column 6, lines 10-15) with the on screen display (Schumann: column 6,

lines 40-55; column 2, lines 1-15), as specified.

Regarding claim 29, Schumann discloses that the MPEG encoder is arranged to encode

subsequent P frames based on the encoded I frames (Schumann: column 5, lines 5-15), as in the

claim.

Schumann discloses an MPEG on screen display coder (Schumann: column 2, lines 1-15;

column 4, lines 1-14), comprising: MPEG encoder arranged to encode frames with the on screen

display device in response to the output of the on screen display turn on device (Schumann:

column 4, lines 50-63); and a multiplexer arranged to replace the original frames with the

encoded frames for supply to a digital television receiver (Schumann: column 5, lines 30-45), as

in claim 32.

Regarding claim 37, Schumann discloses that the encoded frames have a time base which

is slaved to the original frames (Schumann: column 10, lines 60-65), as in the claim.

Regarding claim 42, Schumann discloses that the on screen display is overlaid on video

(Schumann: column 6, lines 20-25), as specified.

Regarding claim 46, Schumann discloses that the MPEG encoder is arranged to encode I

frames (Schumann: column 6, lines 10-15), as specified.

Regarding claim 47, Schumann discloses that the MPEG encoder is arranged to encode

subsequent P frames based on the encoded I frames (Schumann: column 5, lines 5-15), as in the

claim.

Regarding claim 56, Schumann discloses that the MPEG encoder is arranged to encode I

frames (Schumann: column 6, lines 10-15) with the on screen display (Schumann: column 6,

lines 40-55; column 2, lines 1-15), as specified.

Regarding claim 57, Schumann discloses that the MPEG encoder is arranged to encode

subsequent P frames based on the encoded I frames (Schumann: column 5, lines 5-15), as in the

claim.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 59-62, 64, 70, 74-75, 81-83 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Schumann et al., (hereinafter referred to as "Schumann") in view of Naimpally

et al., (hereinafter referred to as "Naimpally").

Schumann discloses an MPEG on screen display coder (Schumann: column 2, lines 1-15;

column 4, lines 1-14), comprising: MPEG encoder arranged to encode frames with the on screen

display device in response to the output of the on screen display turn on device (Schumann:

column 4, lines 50-63); and a multiplexer arranged to replace the original frames with the

encoded frames for supply to a digital television receiver (Schumann: column 5, lines 30-45), as

in claim 59. However, Schumann fails to disclose that the multiplexer is arranged to add make-

up packets such that each encoded frame has as many transport packets as the original frames, as

in the claim. Naimpally discloses transport stream processing method including the addition of

make-up packets (Naimpally: column 4, lines 35-40) for transmission of transport packets

(Naimpally: column 4, lines 15-27) of video data (Naimpally: column 4, lines 41-47) that has

been encoded according to MPEG (Naimpally: column 1, lines 45-68; column 2, lines 1-19) in

order to efficiently process encoded video data at a desired transmission rate (Naimpally: column

2, lines 24-65). Accordingly, it would have been obvious for one of ordinary skill in the art to

incorporate the Naimpally addition of make-up packets into the transport stream into Schumann

on screen display coder in order efficiently process encoded video data at a desired transmission

rate. The Schumann on screen display coder, now incorporating Naimpally's addition of make-

up packets, has all of the features of claim 59.

Regarding claim 60, the Schumann on screen display coder, now incorporating

Naimpally's addition of make-up packets, further discloses that the packets are null packets

(Naimpally: column 5, lines 1-5), as in the claim.

Regarding claim 61, the Schumann on screen display coder, now incorporating

Naimpally's addition of make-up packets, has that the make up packets are program map table

packets (Naimpally: column 8, lines 55-65), as in the claim.

Schumann discloses an MPEG on screen display coder (Schumann: column 2, lines 1-15;

column 4, lines 1-14), comprising: a buffer arranged to receive and buffer an MPEG transport

data stream containing frames of a selected and frames of a non-selected program (Schumann:

column 4, lines 15-25); MPEG encoder arranged to encode frames with the on screen display

device in response to the output of the on screen display turn on device (Schumann: column 4,

lines 50-63); and a multiplexer arranged to replace the original frames with the encoded frames

for supply to a digital television receiver (Schumann: column 5, lines 30-45), as in claims 62 and

81. However, Schumann fails to disclose that the multiplexer is arranged to add make-up packets

such that each encoded frame has as many transport packets as the original frames, as in the

claim. Naimpally discloses transport stream processing method including the addition of make-

up packets (Naimpally: column 4, lines 35-40) for transmission of transport packets (Naimpally:

column 4, lines 15-27) of video data (Naimpally: column 4, lines 41-47) that has been encoded

according to MPEG (Naimpally: column 1, lines 45-68; column 2, lines 1-19) in order to

efficiently process encoded video data at a desired transmission rate (Naimpally: column 2, lines 24-65). Accordingly, it would have been obvious for one of ordinary skill in the art to incorporate the Naimpally addition of make-up packets into the transport stream into Schumann on screen display coder in order efficiently process encoded video data at a desired transmission rate. The Schumann on screen display coder, now incorporating Naimpally's addition of make-up packets, has all of the features of claims 62 and 81.

Regarding claim 64, the Schumann on screen display coder, now incorporating Naimpally's addition of make-up packets, has that the encoded frames have a time base which is slaved to the original frames (Schumann: column 10, lines 60-65), as in the claim.

Regarding claim 70, the Schumann on screen display coder, now incorporating Naimpally's addition of make-up packets, has that the on screen display is overlaid on video (Schumann: column 6, lines 20-25), as specified.

Regarding claim 74, the Schumann on screen display coder, now incorporating Naimpally's addition of make-up packets, has that the MPEG encoder is arranged to encode I frames (Schumann: column 6, lines 10-15), as specified.

Regarding claim 75, Schumann on screen display coder, now incorporating Naimpally's addition of make-up packets, has that the MPEG encoder is arranged to encode subsequent P frames based on the encoded I frames (Schumann: column 5, lines 5-15), as in the claim.

Regarding claim 82, the Schumann on screen display coder, now incorporating Naimpally's addition of make-up packets, further discloses that the packets are null packets (Naimpally: column 5, lines 1-5), as in the claim.

Regarding claim 83, the Schumann on screen display coder, now incorporating

Naimpally's addition of make-up packets, has that the make up packets are program map table

packets (Naimpally: column 8, lines 55-65), as in the claim.

Allowable Subject Matter

7.   Claims 18-19, 30-31, 39, 48, 58, 66, and 76 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

These dependent claims all recite the step for "...supplying first and second I frame

markers..." which are not anticipated nor obvious over the art of record. Accordingly, these

claims are amended as indicated above, and rejected claims 1, 11, 16-17, 28-29, 32, 37, 42, 46-

47, 56-57 59-62, 64, 70, 74-75, and 81-83 are canceled, the application would be placed in a

condition for allowance.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Reitmeier discloses a channel selection methodology in an ATSC/NTSC television

receiver.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The

examiner can normally be reached on Monday-Friday 8 hours.